# Financial Transmission Rights/ Auction Revenue Rights

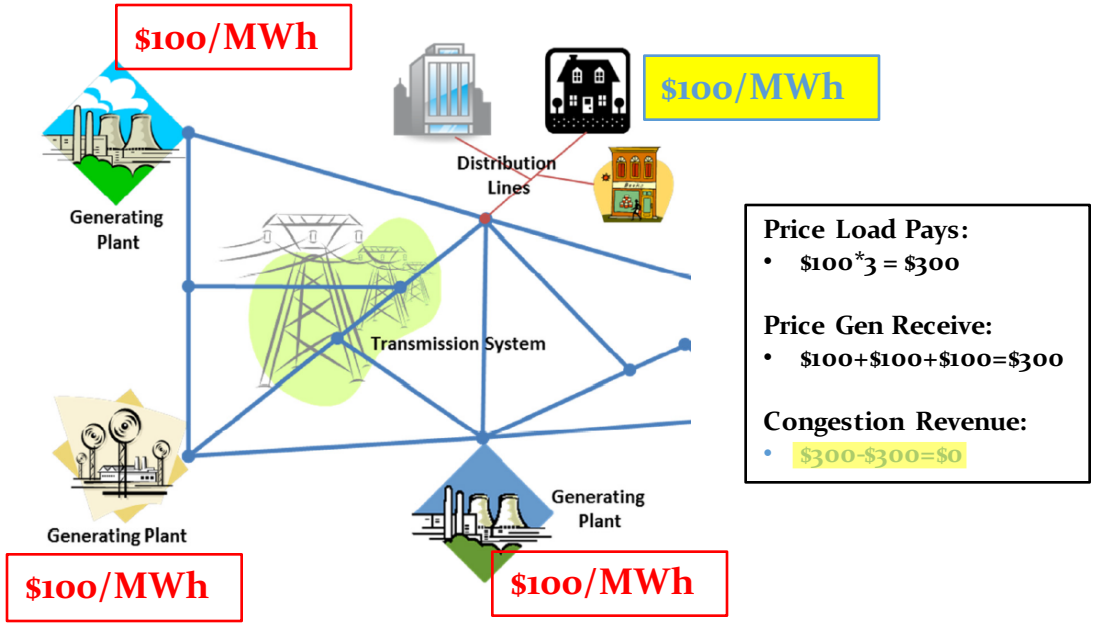
- Background
- EL16-6
- 156 FERC ¶ 61,180
- NJ/DE Request for Rehearing

Joe DeLosa

November 1, 2016

# Background, Congestion

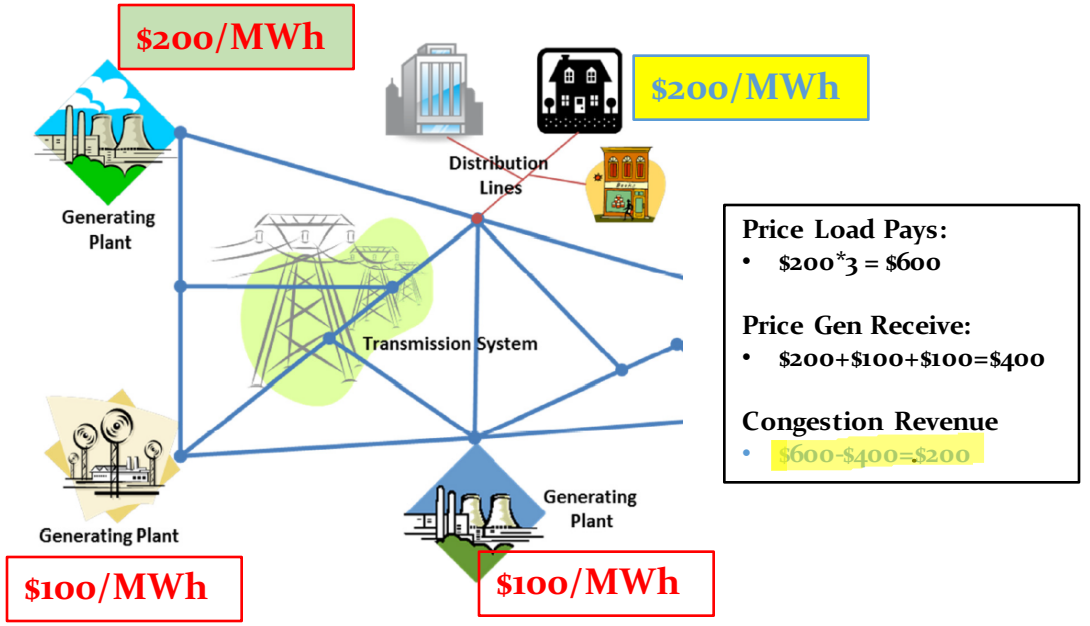
- Congestion is defined as the revenue difference between the amount load pays for energy and (minus) the amount that generators receive for the provision of energy.
  - This occurs as a result of the fact that PJM is a single clearing price market:




**Price Load Pays:**
- $100*3 = $300

**Price Gen Receive:**
- $100+$100+$100=$300

**Congestion Revenue:**
- $300-$300=$0




**Price Load Pays:**
- $200*3 = $600

**Price Gen Receive:**
- $200+$100+$100=$400

**Congestion Revenue**
- $600-$400=$200

Picture from NARUC Transmission White Paper, January 2014. Figure 2.

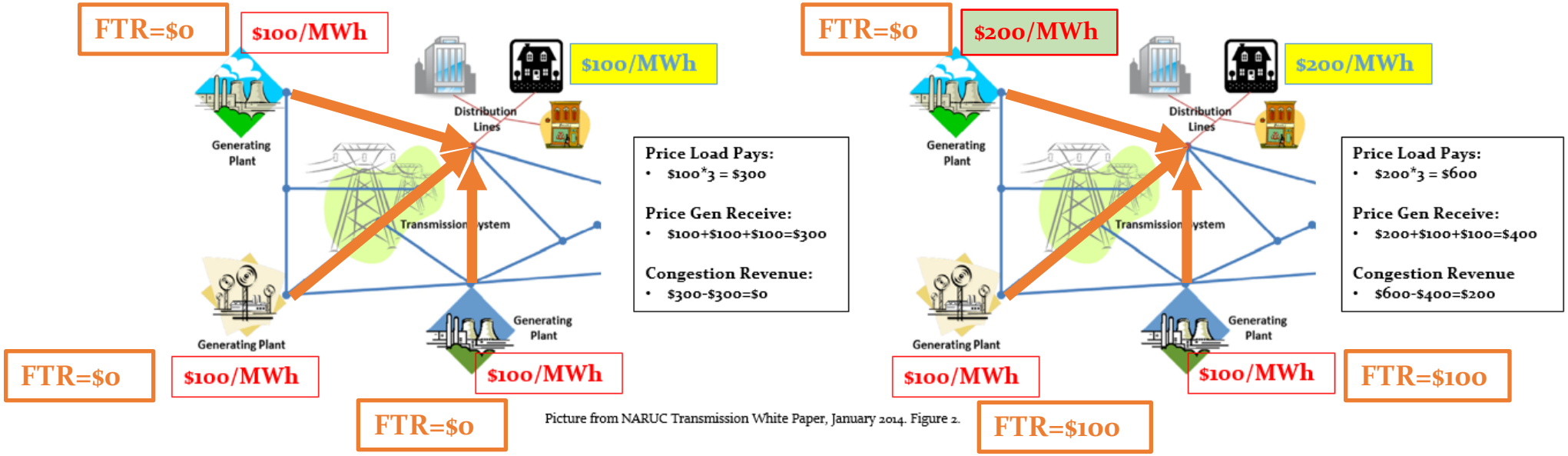
# Background, Congestion and the FPA

- What to do with this congestion revenue?
- 16 USC §824q(b)(2)
  - "Any load-serving entity ("LSE")… is entitled to use the firm transmission rights, or, equivalent tradable or **financial transmission rights, in order to deliver the output or purchased energy**, or the output of other generating facilities or purchased energy to the extent deliverable using the rights, to the extent required to meet the service obligation of the load-serving entity."

- Federal law provides for load to receive the *financial* rights to deliver the lower-cost energy in PJM to load.
  - Purpose of FTRs: Load ability to hedge against congestion, provide rights to the low-cost energy in PJM
- This makes sense: *Load pays for the transmission system for this exact purpose through FERC-approved rates.*

# Background, PJM Treatment of Congestion

- What has PJM done with this revenue?
- Financial Transmission Right ("FTR") / Auction Revenue Right ("ARR") construct, which essentially:
  - Assigns ARRs to LSEs who can either convert them to FTRs, or sell them in an FTR auction to other parties who wish to buy them.
  - <u>The FTR is then valued at the amount of congestion over a given path:</u>




Picture from NARUC Transmission White Paper, January 2014. Figure 2.

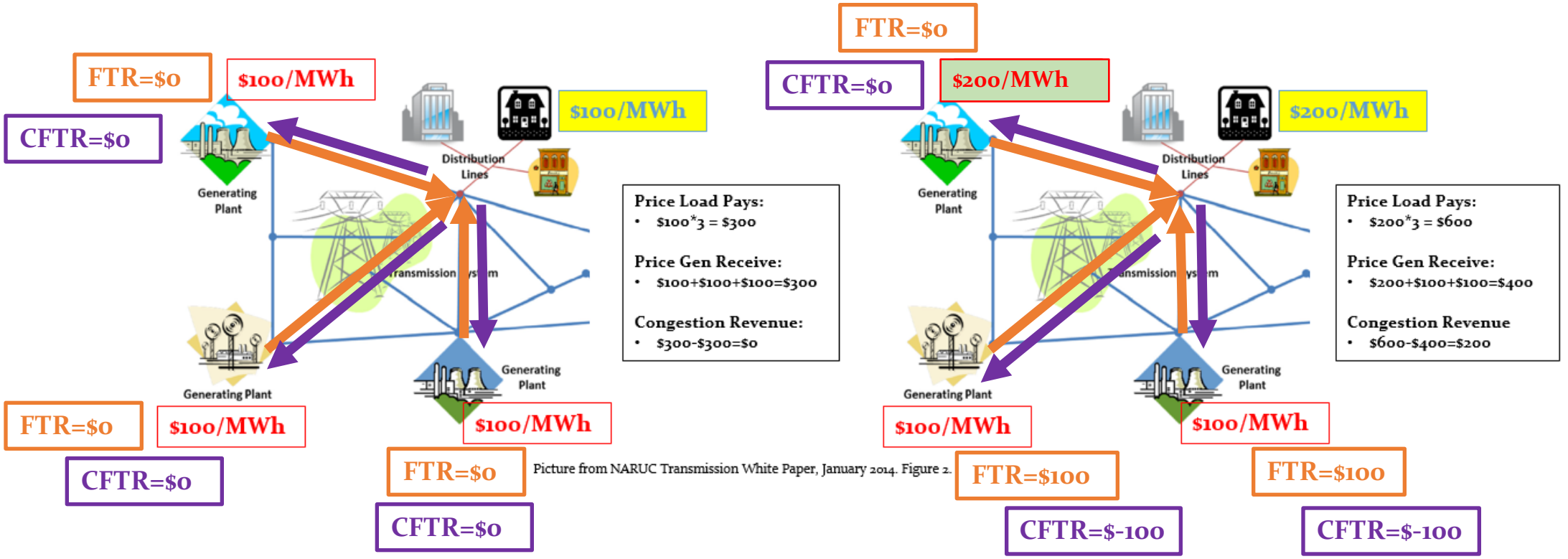
# Background, Counterflow FTRs

- Market participants may purchase Counterflow FTRs ("CFTR")
  - These are the "opposite" of FTRs.

Where FTRs are *bought* (or converted from ARR) and are positively valued (FTR = bought or self-scheduled ARR, revenue **paid from** PJM based on congestion).

A market participant is *paid* upfront to take a CFTR which is negatively valued (CFTR = paid upfront to take CFTR, market participant takes on obligation **to pay** PJM based on congestion).

# Example, Counterflow FTRs




Picture from NARUC Transmission White Paper, January 2014. Figure 2.

# Day-Ahead and Real-Time Energy Market

- PJM has Day-Ahead ("DA") and Real-Time ("RT") markets
  - DA market settles Day ahead
    - Any positions taken DA (quantity and price for buy bid, sell offer) are financially firm
  - RT market settles in Real-time
    - Any deviations from quantities DA, price settles **again** in RT for a different price
    - Is typically different from DA settlement
    - Clears the ***balance*** of positions (e.g. what's left over)
- **Balancing Congestion: Congestion which occurs in the RT market**

# EL16-6

- Why did PJM feel the need to file this?
  1. FTR "Underfunding"
     - PJM market participants have attempted and succeeded to define the "value" of the FTR as the ***value DA*** (DA value is also called "Target Allocations")
       - In contrast to 16 USC §824q(b)(2) which requires the "financial transmission rights, in order to **deliver** the output or purchased energy"
       - Energy is only **delivered in RT, not DA, because it is 'a day ahead' of energy *delivery***
     - "Underfunding" occurs when there is less money available than required to pay Target Allocations
     - In order to conform to the FPA, value of FTR must include DA and RT, in order to contain all the costs required to 'deliver the output or purchased energy.'
  - Why does this happen?
    - PJM over-allocates ARRs, meaning there are more ARRs allocated to LSEs than the congestion revenue can pay
    - PJM allocates ARRs based on a historical source/sink points from 1998.
  - This results in a "**payout ratio**" which is the % of revenues available to pay FTRs
    - (e.g. 80% payout ratio would result in a payment of $0.80 for every $1 of FTR held)

# EL16-6

- Why did PJM feel the need to file this?
  2. Eliminate Portfolio Netting
     - (Remember **Negatively valued CFTRs**, **Positively valued FTRs**, and the **payout ratio**)
       - (**CFTRs** obliges a market participant to *pay congestion revenues*)
       - (**FTRs** entitle a market participant to *receive congestion revenues*)
       - (The **payout ratio** is the % of revenue available to pay FTRs)

  - What is Portfolio Netting?
    - PJM Status Quo
    - It is the practice of applying the payout ratio to both FTRs and CFTRs.
  - Why doesn't this make sense?
    - Holders of CFTRs are paid "up-front" (at 100%) to take on the risk across that CFTR path.
    - Allowing CFTR holders to *reduce* their *obligation* (when they have been paid 100% to shoulder that risk) is illogical.
    - Allowing this reduced obligation results in less money available to pay FTR holders, and further lowers the payout ratio.

# EL16-6

- Procedural Background/Delaware Involvement:
  - PJM Initial Filing: October 19, 2015
  - FERC Order Setting Technical Conference: December 28, 2015
  - FERC Technical Conference: February 4, 2016
  - FERC Notice Inviting Post-Technical Conference Comments: February 23, 2016
  - NJ/DE Post-Technical Conference Comments: March 29, 2016
    - Supported by: DE DPA, NC PUC, WV PUC, MD PSC
  - OPSI Resolution 2016-4 on FTRs: August 18, 2016 (Passed Unanimously)
  - FERC Order, 156 FERC ¶ 61,180: September 15, 2016
  - NJ/DE Request for Rehearing: October 14, 2016
    - Supported by MD PSC

# 156 FERC ¶ 61,180 (Sep. 15, 2016)*

- What did FERC Address?
  1. FTR "Underfunding"

  2. Portfolio Netting

  3. Balancing Congestion
     - FPA section 206 (16 USC §824e(a))
       - Whenever the Commission, after a hearing held upon its own motion or upon complaint, shall find that any rate… by any public utility for any… sale subject to the jurisdiction of the Commission,… is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate… to be thereafter observed and in force, and shall fix the same by order. ***Any complaint or motion of the Commission to initiate a proceeding under this section shall state the change or changes to be made in the rate, charge, classification, rule, regulation, practice, or contract then in force, and the reasons for any proposed change or changes therein…***

*("The Order")

# The Order

- What did FERC Address?
  1. <u>FTR "Underfunding"</u>
     - FERC required PJM to update the source/sink points with presently used generation
  2. <u>Portfolio Netting</u>
     - FERC rejected PJM's proposal to eliminate Portfolio Netting
  3. <u>Balancing Congestion</u>
     - FERC reversed its prior decision in *First Energy**
     - FERC included Balancing Congestion in its definition of the FTR calculation

**First Energy Solutions Corp. v. PJM*, 143 FERC ¶ 61,209 (June 5, 2013), *reh'g denied*, 151 FERC ¶ 61,205 (June 8, 2015)

# So What?

- All Congestion Revenues Should be Returned to Load
  - Load pays for the transmission system for the sole purpose of delivering energy
- 2013/14, 2014/15 planning periods load lost ~$1.5B* in congestion revenue.
  - At 2.4% Delaware Load Ratio Share, $36,000,000

***$18,000,000/yr***

*2015 State of the Market Report for PJM, Independent Market Monitor at 520, Table 13-44; Post-Technical Reply Comments of the Joint State Commissions and Consumer Advocates, Docket EL16-6 (March 29, 2016), at 6-7.

# Our Rehearing Request

- Balancing Congestion
  - Arbitrarily departs from precedent – FPA Section 206
  - Arbitrary reasoning:
    - Cost Causation – Load does not solely cause Balancing Congestion
    - Efficacy of FTRs as a hedge – Degrades the product's hedging qualities
- The Order arbitrarily overlooks evidence in the record supporting a market redesign
- The Order arbitrarily upholds PJM's existing rules with respect to portfolio netting as just and reasonable.